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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,603	02/26/2004	Hideyuki Ikoma	009682-130	2825

21839 7590 09/21/2005

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EXAMINER

FAISON, VERONICA F

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/786,603

Applicant(s)

IKOMA ET AL.

Examiner

Veronica F. Faison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bui et al (US Patent 5,554,212) in view of Murakami et al (US Patent 4,793,860).

Bui et al disclose an aqueous phase change ink composition comprising a nonionic surfactant such as ethylene oxide propylene oxide block copolymer surfactant and polyoxamine. The reference further discloses that the polyoxamine (TETRONIC 1307) has a molecular weight of 17,000. The reference also discloses that ethylene oxide propylene oxide block copolymer (PLURONIC) may have molecular weight of about 1,000 to about 50,000. In the examples the nonionic surfactants are present in an amount that is encompassed by Applicants claimed range. The examples also show a colorant is present in the composition. The reference remains silent to the HLB of 8 or more or a cloud point of 50°C or higher. However, the reference discloses that TETRONIC 1307 and PLURONIC F127 which are well known to have a HLB of 8 or more, may be used in the composition. See abstract, col. 2 lines 59-67, col. 3 line 62-col. 4 line 33, col. 6 lines 36-62, and examples. Applicants are referred to the cited McCuthcheon's which shows that well known HLB of TETRONIC 1307 and PLURONIC F127.

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Bui et al fail to teach ball point pen.

Murakami et al teach an aqueous ink composition comprising a dye, a polyhydric alcohol and water (abstract and col. 2 lines 44-51). The reference further teaches that a surfactant may be included in the ink composition. The reference teaches that the aqueous ink composition is suitable for writing instruments such as ball-point pen, marker, fountain pen, and for recording apparatus including a pen plotter, and for ink jet printer (col. 1 lines 5-10). Therefore it would have been obvious to one of ordinary skill in the art that the ink composition of Bui et al could be employed in the writing instruments of Murakami et al because Murakami et al teaches that an aqueous ink may be used in a writing instrument and an ink jet printer.

Claims 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al (US Patent 5,412,021) in view of Yamamoto et al (US Patent 5,203,913).

Nakanishi et al disclose a water-based erasable ink composition comprising water, a colorant, water-soluble polyvinyl acetal resin, and an aqueous emulsion of an aliphatic carboxylic acid ester. The reference further discloses that a polyoxyethylene polyoxypropylene block copolymer having a molecular weight of about 700 to 3000 may be present in the composition in amount of 0.1 to 5 percent by weight. The reference remains silent to the HLB of 8 or more or a cloud point of 50°C or higher. However, the reference discloses that PLURONIC F68 which are well known to have a HLB of 8 or more, may be used in the composition. See abstract, col. 2 lines 35-66, col. 5 lines 24-57, and claims 1, 4, 7 and 11. Applicants are referred to the cited McCutcheon's which

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shows that well known HLB of PLURONIC F68. Nakanishi et al fail to teach a ball-point pen.

Yamamoto et al teach an erasable aqueous ink composition that may be used in a wide variety of writing devices such as felt-tipped pen, ball-point pens, line markers, and plotters (col. 3 lines 30-39).

Therefore it would have been obvious to one of ordinary skill in the art that the ink composition of Nakanishi et al may be used in a number of writing devices including ball-point pens as Yamamoto teaches a number of writing devices that may be used with a water-based erasable ink such as felt-tipped (markers).

### ***Conclusion***

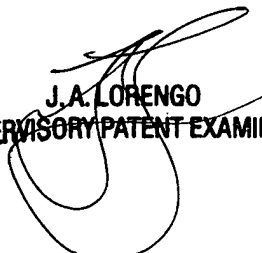
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VFF  
9-16-05

  
J.A. LORENZO  
SUPERVISORY PATENT EXAMINER